

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) An apparatus for fabricating a three-dimensional object from a representation of the object stored in memory, the apparatus comprising:
a rotary build table for receiving successive layers of a build material; and
an array of at least one printhead disposed above the build table.
2. (Original) The apparatus of claim 1, wherein the rotary table rotates continuously.
3. (Original) The apparatus of claim 1 further comprising a build material delivery system comprising:
a storage means for holding the build material; and
a conveying means for delivering the build material to the build table.
4. (Original) The apparatus of claim 3 further comprising:
at least two storage chambers for holding at least two build material components separate from each other; and
a blender for mixing the build material components in a predetermined ratio for delivery to the build table.
5. (Original) The apparatus of claim 1 further comprising a spreader for distributing the build material over at least a portion of the build table.
6. (Original) The apparatus of claim 5, wherein the spreader comprises a counter-rotating roller.
7. (Original) The apparatus of claim 6, wherein the counter-rotating roller is skewed with respect to a radius of the rotary build table to induce excess build material to migrate over an edge of the build table.
8. (Original) The apparatus of claim 7 further comprising a sensor disposed below the edge of the build table to detect an amount of the excess build material.

9. (Original) The apparatus of claim 8, wherein an amount of build material delivered to the build table is adjusted in response to the amount of excess build material detected.
10. (Original) The apparatus of claim 1, wherein the array prints an entire surface of the build table by continuous consecutive radial scanning motions.
11. (Original) The apparatus of claim 1, wherein the array is configured to dispense fluid at substantially any radial location of the rotary build table without adjustment.
12. (Original) The apparatus of claim 11, wherein the array can be adjusted incrementally radially.
13. (Original) The apparatus of claim 1, wherein the array can be displaced from a normal printing position for servicing.
14. (Original) The apparatus of claim 13, wherein the array can be displaced radially with respect to the rotary build table.
15. (Original) The apparatus of claim 1, wherein the array includes redundant printheads.
16. (Original) The apparatus of claim 1, wherein the apparatus defines an opening for removing the three-dimensional object.
17. (Original) The apparatus of claim 16, wherein the three-dimensional object is removed through a top opening of the build table.
18. (Original) The apparatus of claim 1 further comprising a sensor to monitor at least one performance characteristic of the apparatus, wherein the characteristic is selected from the group consisting of print quality, printing errors, print speed, printhead condition, build material quantity, and table position.
19. (Original) The apparatus of claim 18, wherein operation of the apparatus is modified in response to a signal received from the sensor.
20. (Original) The apparatus of claim 19, wherein the array is movable in response to the signal from the sensor.
21. (Original) The apparatus of claim 1 further comprising a plurality of rotary build tables.

22. (Original) An apparatus for fabricating a three-dimensional object from a representation of the object stored in memory, the apparatus comprising:
a generally circular build table for receiving successive layers of a build material; and
an array of at least one printhead disposed above the build table and movable relative to the build table.
23. (Original) The apparatus of claim 22, wherein the array is movable over at least a portion of a build surface defined by the generally circular build table.
24. (Original) The apparatus of claim 22, wherein the array is configured to dispense fluid at substantially any radial location of the build table by moving the array radially to the desired location.
25. (Original) The apparatus of claim 22, wherein the array moves continuously about the build table.
26. (Original) The apparatus of claim 22, wherein the generally circular build table is movable in a vertical direction.
27. (Original) A method of fabricating a three-dimensional object comprising the steps of:
depositing successive layers of a build material on a rotary build table; and
depositing a liquid in a predetermined pattern on each successive layer of the build material to form the three-dimensional object.
28. (Original) The method of claim 27 further comprising the step of rotating the build table continuously.
29. (Original) The method of claim 27, wherein the step of depositing successive layers of a build material on a rotary build table includes distributing the build material over at least a portion of the build table with a spreader.
30. (Original) The method of claim 27 further comprising the step of measuring an amount of excess build material deposited on the rotary build table.

31. (Original) The method of claim 30 further comprising the step of adjusting the amount of build material deposited on the rotary build table based on the amount of excess build material measured.
32. (Original) The method of claim 27, wherein the step of depositing a liquid is performed by an array of at least one printhead.
33. (Original) The method of claim 32, wherein the array is configured to dispense fluid at substantially any radial location of the rotary build table without adjustment.
34. (Original) The method of claim 32, wherein the array prints an entire surface of the build table by continuous consecutive radial scanning motions.
35. (Original) The method of claim 32, wherein the array of printheads can be adjusted incrementally radially relative to the rotary build table.
36. (Original) The method of claim 32, wherein the array of printheads can be displaced from a normal printing position for servicing.
37. (Original) The method of claim 27 further comprising the step of removing the three-dimensional object.
38. (Original) A method of fabricating a three-dimensional object comprising the steps of:
depositing successive layers of a build material on a generally circular build table; and
depositing a liquid in a predetermined pattern on each successive layer of the build material to form the three-dimensional object.
39. (Original) The method of claim 38, wherein the step of depositing a liquid is performed by an array of at least one printhead.
40. (Original) The method of claim 39, wherein the array is movable over at least a portion of a build surface defined by the generally circular build table.
41. (Original) The method of claim 38, wherein the generally circular build table is movable in a vertical direction.

42. (Original) The method of claim 39, wherein the array is configured to dispense fluid at substantially any radial location of the build table by moving the array radially to the desired location.

43-53 (Cancelled)